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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,465	02/27/2002	Kano Asai	M1909.0004/P004	4762

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EXAMINER
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JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/083,465

Applicant(s)

ASAI ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This Action is in regards to the Reply received on 06/16/2005.

#### ***Response to Amendment***

1. This action is responsive to the application filed on 02/27/2002. Claimed priority is granted from Foreign Application 056872/2001, Filing Date 10/17/2001. No claim has been amended. There are no newly added claims. Claims 1-8 are pending. Claims 1-8 represent a method and apparatus for a " System and Method for providing dynamic service using front-end".

#### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-8 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the same ground of rejection reiterated from the First Office Action as explained here below.

The dependent claims stand rejected as articulated in the First Office Action and all objections not addressed in Applicant's response are herein reiterated.

#### ***Information Disclosure Statement***

3. The references listed on the Information Disclosure Statement submitted on 02/27/2002 have been considered by the examiner (see attached PTO-1449A).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Chilton (Chilton), Patent No. 6,732,117 B1 in view of Bommareddy et al (Bommareddy), U.S. Patent No: 6,779,039 B1, further in view of Youselfi'zadeh (Youselfi'zadeh), Patent No. 6,950,848 B1.

Regarding **claim 1**, Chilton teaches the invention substantially as claimed.

Chilton discloses a service providing system using front-ends (fig. 3, items 114; fig. 4, items 60, and 114) comprising:

a server for processing service tasks in response to service request from a client, and delivering service to the client (fig. 4, items 60, 62-64; column 9, lines 35-67; fig. 3);

a means for measuring service response time from when the client requests the server for service to when the server delivers the service to the client (column 2, lines 60-67; column 3, lines 1-36);

a means for judging the service response time (column 2, lines 60-67; column 3, lines 1-36);

a means for creating a front-end to process the service tasks of the server and perform the service delivery in whole or in part based on the service response time (*column 8, lines 1-57; column 9, lines 35-67*);

a means for having the front-end process the service tasks and performs the service delivery in whole or in part as proxy for the server(*column 8, lines 1-57; column 9, lines 35-67*). However, Chilton does not specifically teach the step of creating a set value to judge the service response time.

In the same field of endeavor, Bommareddy teaches a method "*...a probe response time and network utilization metrics, to track the time to probe a network server ...*" [see Bommareddy, *column 17, lines 27-67; column 18, lines 1-65*].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Bommareddy's teachings of a method and apparatus to use a set time to compare the service response time, with the teachings of Chilton, for the purpose of "*providing a system and a method with less network traffic and a response time that is superior to the configuration that requires the entire database from the data storage system and searching database.*" as stated by Chilton in lines 31-36 of column 3.

Furthermore, in the same field of endeavor, Youselfi'zadeh teaches a method "*wherein the database server with the fastest measured from the response time is selected; (5) Observed, a combination of LNC and FRT; and Predictive, wherein the*

database server with an observed improving performance is selected. Other load balancing schemes are possible and can be utilized. The LB module 32 can utilize one of, or a weighted sum of two or more of, the above load balancing schemes with manually or adaptively adjustable weighting functions (factors) to assign incoming client requests from web servers 18 to the respective ones of the multiple database servers 24 to balance the load of the database servers 24". [See Youselfi'zadeh; column 27, lines 27-56]. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Youselfi'zadeh's teachings of a method and apparatus to use a set time to compare the service response time, with the teachings of Chilton, for the purpose of *"providing a system and a method with less network traffic and a response time that is superior to the configuration that requires the entire database from the data storage system and searching database."* as stated by Chilton in lines 31-36 of column 3. By this rationale **claim 1** is rejected.

Regarding **claim 2**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing system using front-ends claimed in claim 1, further comprising a means for bringing the front-end to rest when the response time recovers to less than the setting value after the front-end has processed the service tasks and performed the service delivery in whole or in part as proxy for the server [see *Bommareddy, column 15, lines 44-67; column 16, lines 1-18; column 22, lines 6-24*]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 2 [see *Chilton, column 3, lines 31-36*]. By this rationale **claim 2** is rejected.

Regarding **claim 3**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing system using front-ends claimed in claim 1, further comprising a means for charging a service provider according to the volume of traffic between the client and front-end, and/or the amount of computer resources consumed by the front-end [see *Bommareddy*; column 5, lines 34-65; see *Chilton*, column 9, lines 35-67; column 10, lines 1-64]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 3 [see *Chilton*, column 3, lines 31-36]. By this rationale **claim 3** is rejected.

Regarding **claim 4**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing system using front-ends claimed in claim 1, wherein the front-end is created on a communication device [see *Chilton*, column 9, lines 35-67; column 10, lines 1-64]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 4 [see *Chilton*, column 3, lines 31-36]. By this rationale **claim 4** is rejected.

Regarding **claim 5**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches a service providing method using front-ends [see *Chilton*, fig. 4, items 60, and 114] comprising the steps of:

measuring service response time from when a client requests a server for service to when the server delivers the service to the client [see *Chilton*, (fig. 4, items 60, 62-64; column 9, lines 35-67];

judging whether or not the service response time is equal to or more than a setting value [see *Chilton*, column 2, lines 60-67; column 3, lines 1-36];

creating a front-end to process the service tasks of the server and perform the service delivery in whole or in part when the service response time is equal to or more than the setting value [see Chilton, *column 8, lines 1-57; column 9, lines 35-67*; see Bommareddy, *column 17, lines 27-67; column 18, lines 1-65*]; and

having the front-end process the service tasks and perform the service delivery in whole or in part as proxy for the server[see Chilton, *column 8, lines 1-57; column 9, lines 35-67*; see Bommareddy, *column 17, lines 27-67; column 18, lines 1-65*]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 5 [see Chilton, *column 3, lines 31-36*]. By this rationale **claim 5** is rejected.

Regarding **claim 6**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing method using front-ends claimed in claim 5, further comprising the step of bringing the front-end to rest when the response time recovers to less than the setting value after the front-end has processed the service tasks and performed the service delivery in whole or in part as proxy for the server see Bommareddy, *column 15, lines 44-67; column 16, lines 1-18; column 22, lines 6-24*. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 6 [see Chilton, *column 3, lines 31-36*]. By this rationale **claim 6** is rejected.

Regarding **claim 7**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing method using front-ends claimed in claim 5, further comprising the step of charging a service provider according to the volume of traffic between the client and front-end, and/or the amount of computer resources consumed by the front-end[see Bommareddy, *column 5, lines 34-65*; see Chilton, *column 9, lines*



35-67; *column 10, lines 1-64*]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 7 [see *Chilton, column 3, lines 31-36*]. By this rationale **claim 7** is rejected.

Regarding **claim 8**, the combination Chilton-Bommareddy-Youselfi'zadeh teaches the service providing method using front-ends claimed in claim 5, wherein the front-end is created on a communication device [see *Chilton, column 9, lines 35-67; column 10, lines 1-64*]. The same motivation that was utilized in the combination of claim 1, applies equally as well to claim 8 [see *Chilton, column 3, lines 31-36*]. By this rationale **claim 8** is rejected.

### ***Response to Arguments***

6. Applicant's Request for Reconsideration filed on 06/16/2005 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention.

- A. The Chilton patent discloses no means for measuring service response time. Thus, Applicant respectfully asserts that this limitation is not disclosed by Chilton.
- B. Applicant contends that, Applicant recites a means for creating a front end to process the service tasks of the server. As disclosed in Chilton, there is a front end in the client system 62 which includes a user interface for accessing the

server system. There are no means for creating a front end process to process the service tasks. In Chilton, the data storage system 66 is adapted to receive and respond to inquiries. However, there is no means for creating a front end as recited in Applicant's claim.

C. Applicant contends that, the Office Action recognizes that Chilton does not specifically teach the step of creating a set value to judge the service response time and that time is irrelevant to the Chilton system, beyond the extent that a hash table is used to improve query response time.

D. Applicant contends that even in combining Chilton and Bommareddy, each limitation of Applicant's claim is not disclosed.

7. As to "Point A" it is the position of the Examiner that Chilton teaches the limitations of the above mentioned claims. However, in view of Applicant's remarks, stating that Chilton does not a means for measuring service response time, new reference of Youselfi'zadeh is used to reject this limitation in the claim. Applicant's arguments are deemed moot in view of the above new grounds of rejection as explained above in the rejection of claim 1.

As to Point B, it is the Examiner's position that the prior art of record recites a means for creating a front end to process the service tasks of the server. In order to fully address this contention new prior art reference Youselfi'zadeh teaches this limitation as stated in the rejection of claim 1 above [See Youselfi'zadeh; column 27, lines 27-56].

As to point C, the examiner respectfully disagree with applicant and asserts that Chilton teaches "creating a set value to judge the service response time and that time is irrelevant to the Chilton system, beyond the extent that a hash table is used to improve query response time" as stating in (*column 2, lines 60-67; column 3, lines 1-36*). Furthermore, new prior art reference Youselfi'zadeh discloses this limitation as claimed [see Youselfi'zadeh; column 14, lines 28-67].

As to "Point D", it is also the Examiner's position combining Chilton and Bommareddy, substantially teaches each limitation of Applicant's claim. However, in view of the applicant's remarks, new prior art reference Youselfi'zadeh is used to rejected the every limitation of the claims.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE NON-FINAL.**

9. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

Jude Jean-Gilles

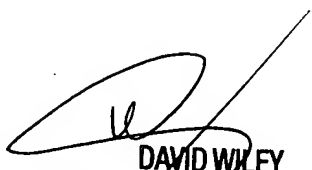
Patent Examiner

Art Unit 2143

JJG



October 12, 2005



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SUPERVISORY PATENT EXAMINER  
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